UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,959	11/01/2001	Kjeld B. Egevang	42390P11637	6990

8791   7590   04/19/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER
HO, CHUONG T

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 November 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

1.   The amendment filed 11/5/04 have been entered and made of record.

2.   Applicant's arguments filed 11/5/04 have been fully considered but they are not persuasive.

In the page 9, lines 15-18, the Applicant alleged that "Crow reference fails to teach, among other things, the following language: "determining whether all packet fragments for said packet have been received using said offset values..." ";

The Application's argument is not persuasive.

Crow (U.S.Patent No. 6,453,357 B1) discloses "determining whether all packet fragments for said packet have been received using said offset values..." (see col 6, lines 17-18, for IP fragments, this may be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the primary fragment 32 and ordered within the fragment set); Clearly, Crow (U.S.Patent No. 6,453,357) discloses "determining whether all packet fragments for said packet have been received using said offset values...".

3.   Claims 1-21 are pending.

Claim Rejections - 35 USC § 102

\

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – ·

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1, 11-12, 13-14, 15, 18 are rejected under 35 U.S.C. 102(e) as being

anticipated by Crow et al. (U.S.Patent No. 6,453,357 B1).

In the claim 1, Crow et al. discloses all the following subject matter: a system to

manage packet fragmentation for address translation, comprising:

Receiving a plurality of packet fragments for a packet having a first address (see col. 5,

lines 65-66, col. 6, lines 12-16);

Wherein each packet fragment includes a packet fragment header (see figures 2A, 2B)

having a packet offset value (48, 68) (see col 6, lines 17-18, for IP fragments, this may

be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4,

lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For

the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is

the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments

in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment

set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Translating first address into a second address (see col. 6, lines 28-29, col. 6, lines 63-65, col. 5, lines 39-41, col. 7, lines 16-20) without reassembling (see col. 6, lines 47-49) packet fragments into packet (col. 6, lines 60-63) and

Determining whether all packet fragment (see figure 4) for packet have been received using said offset value (see col 6, lines 17-18, for IP fragments, this may be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the primary fragment 32 and ordered within the fragment set);

Sending packet fragment using second address (see col. 6, lines 26-28).

5.   In the claim 11, Crow et al. discloses all the following subject matter: a system to manage packet fragmentation for address translation, comprising:

Receiving a plurality of packet fragments for a packet having a first address (see col. 5, lines 65-66, col. 6, lines 12-16);

Wherein each packet fragment includes a packet fragment header (see figures 2A, 2B) having a packet offset value (48, 68) (see col 6, lines 17-18, for IP fragments, this may be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is

the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments

in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment

set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Translating first address into a second address (see col. 6, lines 28-29, col. 6, lines 63-

65, col. 5, lines 39-41, col. 7, lines 16-20) without reassembling (see col. 6, lines 47-49)

packet fragments into packet (col. 6, lines 60-63) and

Determining whether all packet fragment (see figure 4) for packet have been received

using said offset value (see col 6, lines 17-18, for IP fragments, this may be detemined

from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the

fragment offset 48 identifies the number of the primary fragment 32, For the IP

embodiment, the fragment offset is one identifying that the primary fragment 32 is the

first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments in

the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment set

ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Sending packet fragment using second address (see col. 6, lines 26-28).

6.   In the claim 12, Crow et al. discloses a communication module to send packet

fragments to second address (see col. 6, lines 28-29, col. 6, lines 63-65, col. 5, lines 39-

41, col. 7, lines 16-20) (see col. 6, lines 47-49) (col. 6, lines 60-63).

7.   In the claim 13, Crow et al. discloses all the following subject matter: a system to

manage packet fragmentation for address translation, comprising:

A source node (24) to send packet fragments for a packet having a first address (see

col. 6, lines 28-29, col. 6, lines 63-65, col. 5, lines 39-41, col. 7, lines 16-20) (see col. 6,

lines 47-49) (col. 6, lines 60-63);

Receiving a plurality of packet fragments for a packet having a first address (see col. 5,

lines 65-66, col. 6, lines 12-16);

Wherein each packet fragment includes a packet fragment header (see figures 2A, 2B)

having a packet offset value (48, 68) (see col 6, lines 17-18, for IP fragments, this may

be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4,

lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For

the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is

the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments

in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment

set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Translating first address into a second address (see col. 6, lines 28-29, col. 6, lines 63-

65, col. 5, lines 39-41, col. 7, lines 16-20) without reassembling (see col. 6, lines 47-49)

packet fragments into packet (col. 6, lines 60-63) and

Determining whether all packet fragment (see figure 4) for packet have been received

using said offset value (see col 6, lines 17-18, for IP fragments, this may be detemined

from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the

fragment offset 48 identifies the number of the primary fragment 32, For the IP

embodiment, the fragment offset is one identifying that the primary fragment 32 is the

first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments in

the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment set

ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Sending packet fragment using second address (see col. 6, lines 26-28).

8.   In the claim 14, Crow et al. discloses a destination node (destination port) having

second address to receive packet fragments and reassemble packet fragments into

packet (see col. 6, lines 28-29, col. 6, lines 63-65, col. 5, lines 39-41, col. 7, lines 16-

20) (see col. 6, lines 47-49) (col. 6, lines 60-63).

9.   In the claim 15, Crow et al. discloses all the following subject matter: a system to

manage packet fragmentation for address translation, comprising:

Receiving a plurality of packet fragments for a packet having a first address (see col. 5,

lines 65-66, col. 6, lines 12-16);

Wherein each packet fragment includes a packet fragment header (see figures 2A, 2B)

having a packet offset value (48, 68) (see col 6, lines 17-18, for IP fragments, this may

be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4,

lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For

the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is

the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments

in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment

set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Translating first address into a second address (see col. 6, lines 28-29, col. 6, lines 63-65, col. 5, lines 39-41, col. 7, lines 16-20) without reassembling (see col. 6, lines 47-49) packet fragments into packet (col. 6, lines 60-63) and

Determining whether all packet fragment (see figure 4) for packet have been received using said offset value (see col 6, lines 17-18, for IP fragments, this may be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the primary fragment 32 and ordered within the fragment set);

Sending packet fragment using second address (see col. 6, lines 26-28).

10.   In the claim 18, Crow et al. discloses all the following subject matter: a system to manage packet fragmentation for address translation, comprising:

Receiving a plurality of packet fragments for a packet having a first address (see col. 5, lines 65-66, col. 6, lines 12-16);

Wherein each packet fragment includes a packet fragment header (see figures 2A, 2B) having a packet offset value (48, 68) (see col 6, lines 17-18, for IP fragments, this may be detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the fragment offset 48 identifies the number of the primary fragment 32, For the IP embodiment, the fragment offset is one identifying that the primary fragment 32 is

the first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments

in the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment

set ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Translating first address into a second address (see col. 6, lines 28-29, col. 6, lines 63-

65, col. 5, lines 39-41, col. 7, lines 16-20) without reassembling (see col. 6, lines 47-49)

packet fragments into packet (col. 6, lines 60-63) and

Determining whether all packet fragment (see figure 4) for packet have been received

using said offset value (see col 6, lines 17-18, for IP fragments, this may be detemined

from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the

fragment offset 48 identifies the number of the primary fragment 32, For the IP

embodiment, the fragment offset is one identifying that the primary fragment 32 is the

first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments in

the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment set

ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set);

Sending packet fragment using second address (see col. 6, lines 26-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

11.   Claims 2, 3-10, 16, 17, 19, 20-21 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Crow et al. (U.S.Patent No. 6,453,357 B1) in view of Aaker et

al. (U.S.Patent No. 5,815,516).

In the claims 2, 16, 19, Crow et al. "identifying packet fragment having packet

header (see figure 2A, 2B, 3, 4), with packet header having a packet identifier,

translation information; retrieving translation information from packet header and

translating first address into second address using translation information (see col. 4,

lines 9-10, col. 5, lines 68 – col. 6, line 1, col. 5, lines 45-48, col. 6, lines 14-16, lines 20-

25)

However, Crow is silent to disclosing packet header having a packet length.

Aaker et al. (U.S.Patent No. 5,815,515) discloses packet header having fragment

offset value, packet length, see figure 2, col. 4, lines 1-10);

Both Crow, Aaker et al. discloses fragment packet in TCP/IP network. Aaker

discloses packet header having fragment offset value, packet length; Thus, it would

have been obvious to one of ordinary skill in the art at the time of the invention to modify

the system of Crow with the teaching of Aaker to provide a packet header having

fragment offset value, packet length in order to store packet fragments in the queue.

Therefore, the combined system would have been enable to determine whether all

packet fragments for packet have been received.

12.   In the claim 3, Crow discloses translation information comprises a port number

(see col. 5, lines 2-4).

13.   In the claim 4, Crow discloses wherein each of packet fragment includes packet

fragment header having packet identifier, and a more bit (fragment set ID), and

determining that storing each fragment having packet identifier and more bit set to

predeterrmined values (see col. 4, lines 28-30, col. 5, lines 20-27).

14.   In the claims 5, 17, 20, Crow discloses each offset value represents a position

for packet fragment in packet, and determining whether all packet fragments for packet

have been received using offset values comprises: collecting offset values; retrieving

packet length; and determining whether all positions for packet are filled by collected

offset values using packet length (see col 6, lines 17-18, for IP fragments, this may be

detemined from the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-

8, the fragment offset 48 identifies the number of the primary fragment 32, For the IP

embodiment, the fragment offset is one identifying that the primary fragment 32 is the

first fragment of the set. The fragment set ID and offset 46 and 48 allow fragments in

the set to be identified, associated and ordered, see col. 4, lines 28-30, the fragment set

ID and offset 66 and 68 allow the secondary fragment 34 to be associated with the

primary fragment 32 and ordered within the fragment set).

15.   In the claims 6, 7, 8, 9, Crow et al. discloses wherein each packet fragment

includes a packet fragment header having packet identifier, a more bit (fragment set ID)

and an offset value (frag. Offset) (see figures 2, 6), and determining comprises: storing

each packet fragment having packet identifier and offset value is a value other than

zero; and determining whether all packet fragments for packet have been received

using offset values (see col 6, lines 17-18, for IP fragments, this may be detemined from

the fragment offset 48 and/or 68, see figures 2A, 2B, see col. 4, lines 3-8, the fragment

offset 48 identifies the number of the primary fragment 32, For the IP embodiment, the

fragment offset is one identifying that the primary fragment 32 is the first fragment of the

set. The fragment set ID and offset 46 and 48 allow fragments in the set to be identified,

associated and ordered, see col. 4, lines 28-30, the fragment set ID and offset 66 and

68 allow the secondary fragment 34 to be associated with the primary fragment 32 and

ordered within the fragment set).

16.   In the claims 10, 21, Crow et al. discloses detecting an occurrence of a

terminating condition prior to receiving all packet fragments for packet; and releasing

packet fragments in accordance to manage packet (see col. 6, lines 1-4).

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

04/14/05

WELLINGTON CHIN
ERVISORY PATENT EXAMINER